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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,003	09/24/2003	Kiyotaka Inoue	243266US3 CONT	1832
22850	7590	04/08/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			RIVELL, JOHN A	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,003	Applicant(s) INOUE ET AL.	
	Examiner John Rivell	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/29/04 (election).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09242003</u> . | 6) <input type="checkbox"/> Other: _____ |

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Applicant's election with traverse of the species of Group A, figs. 3A-8B, claims 1-11 in Paper No. 12, filed March 24, 2004 is acknowledged. The traversal is on the ground(s) that the Examiner violated M.P.E.P. §816 by failing to address reasons for distinctness, violated M.P.E.P. §806.04(f) by failing to address the mutually exclusive characteristics of the claims and finally that there is no serious burden on the Examiner thus complying with M.P.E.P. §803. This is not found persuasive because firstly, sections §803 and §816 of the M.P.E.P. deal with independent or distinct inventions, not patentably distinct species of the claimed invention. That is these sections deal with the requirements the Office must set forth when applications are filed containing claims to more than one patentable distinct invention. Here, as previously set forth, this application contains claims to patentably distinct embodiments of the claimed invention (i.e. only one invention is disclosed and claimed).

Concerning M.P.E.P. § 806.04 (f)¹, following the "general test" stated therein, a reasonable review of applicants claims finds that claim 1 for example, is readable of the species of Group A whereas claim 12 is readable on the species of Group B. Once satisfied, the Examiner should employ form paragraph 8-01 (M.P.E.P. §809.02(a)) which the Examiner has clearly done. This form paragraph, as well as elections of species in general, have never required the Examiner to set forth the "mutually exclusive characteristics" of the claims as they are traditionally set forth by the claims themselves.

¹ 806.04(f) Claims Restricted to Species, by Mutually Exclusive Characteristics. Claims to be restricted to different species must be mutually exclusive. The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species.

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Further, applicant does not argue that the species identified by the Examiner are not patentably distinct and by so doing it is understood that applicant is of the opinion that the claims are in fact drawn to patentably distinct species of the claimed invention.

The requirement is still deemed proper and is therefore made FINAL.

Claims 12-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12, filed January 29, 2002.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 10 and 11 are rejected under 35 U.S.C. §102 (b) as being anticipated by Yamashita et al.

The patent to Yamashita et al. clearly discloses “a transportable container for sealingly enclosing substrates (specifically semiconductor wafers W), the container comprising; a) a box (10) having an opening (lower) and receiving the substrates (W) therein; b) a removable closure member (13) received by the box and capable of closing the box (as shown in figure 1); and c) a sealing gas introduction system (including tank 20, supply pipe 23, check valve 33, gas passageway 31 and filter 32 as shown in fig. 2) temporarily having a source of a sealing gas (stored in tank 20) to be introduced to purge an interior of the box” as claimed and as disclosed by Yamashita et al.

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Regarding claim 9, as disclosed by Yamashita et al., "the sealing gas is selected from the group consisting of nitrogen, helium and argon" as claimed as the gas disclosed by Yamashita et al. is nitrogen N₂.

Regarding claim 10, as disclosed by Yamashita et al., "the container (10) is (read as) a SMIF (standard mechanical interface) apparatus" as claimed.

Regarding claim 11, as disclosed by Yamashita et al., "the box (10) is adapted to store a cassette (15), the cassette (15) capable of holding the substrates (W)" as claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of DeAngelis et al.

The patent to Yamashita et al. discloses all the claimed features, as noted above, including "a vessel for holding the sealing gas previously (20); a gas supply line (31) for supplying the sealing gas inside the vessel (20) into the interior of the box (10)", with the

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exception of having "a gas exhausting line for exhausting gas contained in the interior of the box".

The patent to DeAngelis et al. discloses that it is known in the art to employ "a gas exhaustion line" shown in fig. 4 at the upper section 316 including filter 328, valved coupling 360 and conduit 382 along with the supply line shown at the bottom 316 of the figure for the purpose of purging the interior of the transportable wafer container 100 (column 4, lines 12-68).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Yamashita et al. a gas exhaustion line in conjunction with the disclosed supply line for the purpose of perfecting gas purging of the interior of the wafer container as recognized by DeAngelis et al.

Regarding claim 3, note that in Yamashita et al. the "sealing gas inside the vessel is stored in a compressed condition at a predetermined pressure" as claimed.

Regarding claim 7, note that in Yamashita et al. the "sealing gas introduction system is located on either of side walls, a top wall and a bottom wall of the box" as claimed.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al. in view of Fosnight et al.

The patent to Yamashita et al. discloses all the claimed features with the exception of having "a sealed space defined by a contact surface of the box and a contact surface of the closure member... and a pressure control system maintaining a pressure of gas inside the sealed space lower than..." atmosphere.

The patent to Fosnight et al. discloses that it is known in the art to employ a sealed space about the area of contact between the opening of a wafer container and the closure of the opening at vacuum conditions, relative to atmosphere (column 4, lines

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35-54) for the purpose of holding the closure tightly against the opening walls to "prevent vibration, tilting and/or movement" of the closure relative to the opening during storage and to "remove particulates, contaminants and/or gasses" from between the closure and the container opening. Clearly in order to maintain "vacuum conditions" at such a location a "pressure control system" must be inherent.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Yamashita et al. a sealed space between the contact surfaces of the container 10 and the closure 13, which space is maintained at vacuum conditions relative to atmosphere by a "pressure control system" for the purpose of holding the closure tightly against the opening walls to prevent vibration, tilting and/or movement of the closure relative to the opening during storage and to remove particulates, contaminants and/or gasses from between the closure and the container opening as recognized by Fosnight et al.

Claims 4, 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As it concerns the non-elected claims, it appears that objected to claims 4-6 contain allowable generic subject matter in terms of sealing gas system *per se*. That is absent limitations restricting the system specifically to "introduction" of gas "supplied" to the system, or limitation restricting the system specifically to "exhaustion" or vacuum conditions inside the box it is readily apparent that a generic claim covering both pressure and vacuum "purge" conditions of the interior of the box such that the system, carried by the closure member (claim 6) is charged when the closure member is unattached to the box and discharged, e.g. "purging the box interior, when the closure is attached to the box (claim 4). The remaining specifics such as positive pressure

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conditions, negative pressure conditions and the closure/opening vacuum sealing system can then be included as dependent claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (703) 308-2599. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (703) 308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
Art Unit 3753

j.r.